



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/772,952	02/04/2004	Yoshiro Udagawa	1232-5277	5312
27123	7590	03/10/2008		
MORGAN & FINNEGAN, L.L.P. 3 WORLD FINANCIAL CENTER NEW YORK, NY 10281-2101			EXAMINER QUIETT, CARRAMAH J	
			ART UNIT	PAPER NUMBER
			2622	
			NOTIFICATION DATE	DELIVERY MODE
			03/10/2008	ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

PTOPatentCommunications@Morganfinnegan.com  
Shopkins@Morganfinnegan.com  
jmedina@Morganfinnegan.com

<b>Office Action Summary</b>	Application No. 10/772,952	Applicant(s) UDAGAWA, YOSHIRO	
	Examiner Carramah J. Quiett	Art Unit 2622	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 29 January 2008.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1,3 and 5-8 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,3 and 5-8 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 04 February 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>01/09/2008; 01/29/2008</u> | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 01/29/2008 has been entered.

### ***Response to Amendment***

2. The amendment(s), filed on 01/09/2008, have been entered and made of record. Claims 1, 3, and 5-8 are pending.

### ***Response to Arguments***

3. Applicant's arguments with respect to claims 1, 3, and 5-8 have been considered but are moot in view of the new ground(s) of rejection.

### ***Information Disclosure Statement***

4. The information disclosure statements (IDS), filed on 01/09/2008 and 01/29/2008, have been placed in the application file, and the information referred to therein has been considered as to the merits.

***Claim Objections***

5. **Claim 1** is objected to because of the following informalities: Claim 1 recites the limitation,

“...wherein said correction unit, based on the first pixel defect information of the first driving scheme from the plurality of driving schemes, generates the second pixel defect information for the second driving scheme, and stores the second pixel defect information in said pixel defect information storage unit, and wherein said second driving scheme drives to read the second number of pixels of signal from the image sensing device, which the second number is smaller than the first number of pixel of signal read from the image sensing device by the first driving scheme.”

Respectfully, the Applicant has not properly introduced the underlined limitations above. For example, “the first pixel defect information of the first driving scheme” should be “first pixel defect information of a first driving scheme”. Additionally, is the “second driving scheme” from “the plurality of driving schemes”? Please provide a more complete statement. Appropriate correction is required.

6. **Claim 3** is objected to because of the following informalities: Claim 3 recites the limitation, “...wherein the first driving scheme is a driving scheme. Respectfully, is the Applicant referring to the same first driving scheme from the “the plurality of driving schemes” or another “driving scheme”? Please provide a more complete statement. Appropriate correction is required.

***Claim Rejections - 35 USC § 101***

7. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
8. **Claim 7** is rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. It is improper to not have a computer which records a program for an image sensing apparatus as recited in claim 7. When a claim is directed to a computer program, the preamble should be written as (for example), "A computer-readable recording medium which records (or stores) a *computer* program..."

***Claim Rejections - 35 USC § 102***

9. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
10. **Claims 1, 3, and 6-8** are rejected under 35 U.S.C. 102(e) as being anticipated by Oda et al. (U.S. Pat. #6,819,359).

For **claim 1**, Oda discloses an image sensing apparatus (fig. 1) having an image sensing device (14/15) (col. 5, lines 42-40), comprising:

driving unit (30) adapted to\* drive the image sensing device by a plurality of driving schemes (col. 4, line 59 – col. 5, line 23; col. 6, lines 60-67);

pixel defect information storage unit (48) adapted to\* store pixel defect information as information about a pixel defect in the image sensing device in correspondence with each driving scheme (col. 7, lines 55-64; col. 10, lines 46-61); and

Art Unit: 2622

correction unit (28, 30, 32, 34, 36, 48, 120) adapted to\* correct the pixel defect by referring to the pixel defect information in said pixel defect information storage unit in accordance with the driving scheme with which said driving unit drives the image sensing device (col. 6, lines 51-67; col. 7, lines 11-22; col. 7, line 55 – col. 8, line 10; col. 10, lines 46-61),

wherein said correction unit, based on the first pixel defect information (defective-pixel correction function) of the first driving scheme (still image mode) from the plurality of driving schemes (col. 7, lines 55-67), generates the second pixel defect information (previous-pixel-value interpolation) for the second driving scheme (moving image mode; col. 6, lines 19-54; Also, please read col. 11, lines 23-62), and stores the second pixel defect information in said pixel defect information storage unit (col. 10, lines 46-61), and

wherein said second driving scheme drives to read the second number of pixels of signal from the image sensing device, which the second number is smaller than the first number of pixel of signal read from the image sensing device by the first driving scheme. Please read col. 5, line 56 – col. 6, line 10; col. 6, lines 60-67.

For **claim 3**, Oda discloses the apparatus according to claim 1, wherein the first driving scheme is a driving scheme that reads all pixels of the image sensing device (col. 5, line 56 – col. 6, line 10).

For **claim 6**, Oda teaches an image sensing method using an image sensing apparatus having an image sensing device (col. 5, lines 42-40) and driving unit adapted to drive the image sensing device by a plurality of driving schemes (col. 4, line 59 – col. 5, line 23; col. 6, lines 60-67), comprising:

Art Unit: 2622

correcting a pixel defect by referring to pixel defect information in pixel defect information storage unit in accordance with the driving scheme with which the driving unit drives the image sensing device (col. 6, lines 51-67; col. 7, lines 11-22; col. 7, line 55 – col. 8, line 10; col. 10, lines 46-61), the pixel defect information storage unit storing the pixel defect information as information about the pixel defect in the image sensing device in correspondence with each driving scheme (col. 7, lines 55-64; col. 10, lines 46-61).

For **claim 7**, Oda discloses a computer-readable recording medium which records a program for an image sensing apparatus (fig. 1) having an image sensing device (14/15) (col. 5, lines 42-40) and driving unit (30) adapted to\* drive the image sensing device by a plurality of driving schemes (col. 4, line 59 – col. 5, line 23; col. 6, lines 60-67), characterized by causing a computer (28, 30, 32, 34, 36, 48, 120) in the image sensing apparatus to execute processing for correcting a pixel defect by referring to pixel defect information in pixel defect information storage unit in accordance with the driving scheme with which the driving unit drives the image sensing device (col. 6, lines 51-67; col. 7, lines 11-22; col. 7, line 55 – col. 8, line 10; col. 10, lines 46-61), the pixel defect information storage unit (48) storing the pixel defect information as information about the pixel defect in the image sensing device in correspondence with each driving scheme (col. 7, lines 55-64; col. 10, lines 46-61).

**Claim 8** is a “computer-readable recording medium encoded with a computer program for an image sensing apparatus” claim corresponding to claim 7, which is a “computer-readable recording medium which records a program for an image sensing apparatus” claim. Therefore, claim 8 is analyzed and rejected as previously discussed with respect to claim 7.

***Claim Rejections - 35 USC § 103***

11. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

12. **Claim 5** is rejected under 35 U.S.C. 103(a) as being unpatentable over Oda et al. (U.S. Pat. #6,819,359) in view of Kidono et al. (U.S. Pat. #6,970,193).

For **claim 5**, Oda discloses the apparatus according to claim 1. However, Oda does not expressly teach wherein said pixel defect information storage unit is a nonvolatile recording medium.

In a similar field of endeavor, Kidono teaches an imaging apparatus wherein said pixel defect information storage unit is a nonvolatile recording medium (EEPROM; col. 5, lines 25-37). In light of the teaching of Kidono, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the storage unit of Oda with the storage unit as recited in claim 5 so that the address of the stored defective (fault) pixels are easily looked up (Kidono col. 6, lines 13-15) thereby helping to reduce the occurrence of additional fixed pattern noise in an image (Kidono col. 2, lines 26-27).

---

**\*Note:** The Applicant's "*adapted to*" language as used in the claims broadens the scope of the claims. The MPEP states that, "Claim scope is not limited by claim language that suggests or makes optional but does not require steps to be performed, or by language that does not limit a

Art Unit: 2622

claim to a particular structure.” (MPEP 2111.04 [R-3]) In other words at the U.S. Patent and Trademark Office, if a limitation is written with “capable of” language, a reference is deemed to meet that limitation if the reference discusses the same element that, although not actually performing the claimed function, is **structurally capable of** performing it. Accordingly, the Examiner *will not* give a limitation with “capable of” language and a limitation with “adapted to” language patentable weight.

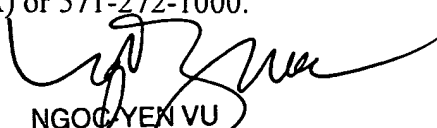
### *Conclusion*

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Carramah J. Quiett whose telephone number is (571) 272-7316. The examiner can normally be reached on 8:00-5:00 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner’s supervisor, NgocYen Vu can be reached on (571) 272-7320. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

CTA  
2/15/08

  
NGOCYEN VU  
SUPERVISORY PATENT EXAMINER